Communicable Disease UPDATE

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2006 Influenza Update

The 2006-2007 influenza season is approaching. From 1990-1999 there were an estimated 36,000 deaths each year in the United States from influenza. Serious illness and death from influenza are most common in those over 65 years of age, those younger than 2 years of age and those with medical conditions placing them at increased risk for complications. Vaccination is the primary method for preventing influenza and its severe complications. Important points from the Advisory Committee on Immunization Practices (ACIP) *2006 Recommendations for the Prevention and Control of Influenza* include:

- **Routine influenza vaccination for children 6 months-5 years of age.** Acknowledging the full burden of disease experienced by children 2-5 years of age, the ACIP voted to expand the recommendations for routine influenza vaccination of young children to include those 24 to 59 months of age (the previous recommendation was only for children 6 to 23 months of age). In light of this addition, the ACIP also expanded the recommendations for influenza vaccine to include household contacts and out-of-home caregivers of children 0-59 months of age.

- **All children 6 months – <9 years of age receiving influenza vaccine for the first time should receive two doses.** Children receiving trivalent inactivated vaccine (TIV) should receive a second dose of TIV vaccine ≥ 1 month after the first dose, preferably before the onset of flu season. Children 5 - <9 year old who receive live attenuated influenza vaccine (LAIV) should have a second dose of LAIV 6-10 weeks after the first dose. Children who receive just one dose of influenza vaccine during the first season that they are vaccinated need only one dose the following season.

- **Recommendation against the use of amantadine and rimantadine.** ACIP recommends that neither amantadine nor rimantadine be used for treatment or prophylaxis of influenza A in the United States because recent data indicate widespread resistance of influenza virus to these medications. Until susceptibility to adamantanes has been re-established among circulating influenza A viruses, oseltamivir or zanamivir may be prescribed if antiviral treatment or prophylaxis of influenza is indicated. For more information on the use of antiviral medication in the prevention and treatment of influenza, go to: http://www.cdc.gov/flu/professionals/treatment/.

As of August, influenza vaccine manufacturers are projecting that approximately 100 million doses of influenza vaccine will be available for this flu season, 16% more doses than were available last season.

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Hepatitis C in Youth 15- to 25-Years Old in Massachusetts

The National Health and Nutrition Examination Survey (NHANES) for 1999-2002 documented the continued burden of hepatitis C in the United States. It is estimated that 3.5 million Americans are chronically infected with hepatitis C virus (HCV). Most were born between 1945 and 1964. This is considered an aging majority, with the peak in age-specific prevalence moving from persons 30-39 years of age observed in the NHANES data from 1988-1994 to 40-49 years of age in the NHANES data from 1999-2002. Most adult HCV-positive persons have a history of injection drug use or receipt of a blood transfusion before 1992.

Little is known however, about HCV infection in adolescents and young adults in the United States. The NHANES 1999-2002 data suggests a lower prevalence of anti-HCV antibody in these age groups as compared with older adults. However, only a small number of younger people participated in NHANES. The sampling frame for NHANES also does not include incarcerated or homeless persons. Studies in Texas and California of adolescents in juvenile detention centers found that approximately 2% demonstrated serologic evidence of HCV infection, and that adolescents with a history of injection drug use were more likely to be HCV seropositive. Studies by Thorpe, *et al* and Hahn, *et al* of young injection drug users found annual incidence of HCV infection ranges from 10%-25%. Pugatch, *et al* found that young injectors in Rhode Island were under-screened for HCV.

In 2005, The British Columbia Centre for Excellence in HIV/AIDS published a call to action regarding HIV and hepatitis C outbreaks among high-risk youth. Examination of data from youth aged 24 years or younger participating in the Vancouver Injection Drug Users Study demonstrated an incidence rate of 52% for HCV in addicted youth at 36 months after enrollment in the study.

Recent analysis of surveillance data in Massachusetts has shown an increased proportion of hepatitis C cases reported in adolescents and young adults between the ages of 15 and 25 years. From 2002 to 2005, the percentage of hepatitis C cases reported in this age group rose from 6.9% to 10.4%. Since risk history is only available on approximately 25% of reports, little is known about what is driving this change.

Given the age of these patients, it is likely that they were recently infected and therefore make an ideal focus for prevention. MDPH is beginning enhanced surveillance of hepatitis C in adolescents and young adults to understand the nature of this trend and

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Look Inside!

Epidemiology

Salmonella Outbreak Related to Owl Pellets

The Epidemiology Program conducted an investigation of an outbreak of gastrointestinal illness which occurred among 46 out of 98 fifth-graders (attack rate = 47%) at an elementary school in June, 2006. Secondary cases were seen in 12 additional pre-kindergarten, first, third and fourth graders, most of whom were close contacts of fifth grade students. After common activities and exposures were investigated, a class project involving the dissection of owl pellets was identified as the source. *Salmonella* Typhimurium tyvar Copenhagen was isolated from stool specimens of ill students, as well as from dissected and unopened owl pellets. PFGE patterns were indistinguishable.

Owl pellet dissection is a popular science project in Massachusetts and across the country. Because owls cannot chew their food, they swallow small prey whole. The indigestible parts of these prey such as fur, bones, teeth and feathers, are compressed into a pellet which the owl must regurgitate before it can eat again. These pellets are then collected, mostly in the Pacific Northwest, by companies that "heat sterilize" them by various methods and then sell them for science projects. School children, either individually or in groups, dissect these pellets to discover and reconstruct the skeletons of animals eaten by the owl. Through this activity, school children learn about the food chain and ecosystems. However, there exists the potential for these young scientists to be exposed to microbes from commercial owl pellets. The owl pellet industry is unregulated with no standardized or proven methods for eliminating infectious organisms. The assumption these pellets were sterile, based on the company's claim, may have led to a more casual approach to the project by both teachers and students, especially in regards to hygienic practices. If the pellets are not sterile and contain Salmonella, students' hands may be contaminated by touching them. If students do not wash their hands properly, and put their hands in their mouth, or put their hands on their lunch and eat it, they may become sick.

To help ensure the safety of this activity without eliminating the project from the curriculum, schools should consider the following recommendations:

- Conduct owl pellet dissection in one day, in as few classrooms as possible, and separate from all eating areas.
- Make sure there is adequate adult supervision during the activity.
- Have students wear disposable gloves during both dissection and subsequent clean up.
- Supply students with disposable trays, plates and dissection tools.
- Assist students in thoroughly cleaning and sanitizing work surfaces after the activity, using disposable paper towels and appropriate cleaning agents and sanitizers.
- Keep handwashing sink areas well stocked with liquid soap, paper towels and handwashing posters.
- Make sure students thoroughly wash their hands after removing gloves.

Guide to Surveillance, Reporting and Control, 2nd Edition, Now Available

The Massachusetts Department of Public Health released the second edition of the Guide to Surveillance, Reporting and Control. The revised edition includes updated chapters on all of the diseases that are reportable to the Bureau of Communicable Disease Control, including chapters on diseases not included in the first edition. The manual has been released on CD and has been sent to all local health departments, school nurses and infection control practitioners. The manual has also been posted to the MDPH website (go to http://www.mass.gov/dph/pubstats.htm and select "Guide to Surveillance and Reporting"). Case report forms have been revised for all diseases and are available by calling the Division of Integrated Surveillance and Informatic Services (ISIS) at (617) 983-6801. Hard copies of the manual have not yet been printed, but additional copies of the CD can be obtained by boards of health, hospital staff and other community partners by calling Cathy McKenna at (617) 983-6856.

Avian Influenza: New

An article outlined in the *Weekly Epidemiological Record* of the World Health Organization (WHO) suggests several conclusions drawn from avian influenza outbreaks from December 2003 to April 2006:

- The number of new countries reporting human cases increased from 4 to 9 after October 2005.
- Half of the cases occurred in people under the age of 20 years; 90% of cases occurred in people under the age of 40 years.
- The overall case-fatality rate was 56%. Case fatality was high in all age groups, but was highest in persons aged 10 to 39 years.
- Assessment of mortality rates and the time intervals between symptom onset and hospitalization, and between symptom onset and death suggests that the illness pattern has not changed during the three years.
- The incidence of human cases peaked during the period roughly corresponding to winter and spring in the northern hemisphere in each of the three years in which cases have occurred.

For more information, visit http://www.who.int/csr/don/2006_06_30/en/index.html.

Measles Update

This year, Massachusetts experienced the largest outbreak of measles since 1993. Eighteen laboratory-confirmed cases have been identified since May 2006, with 3 generations of transmission. The cases ranged in age from 23-45 years, with onsets between May 5th and June 24th.

Measles is a viral illness that is characterized by fever, cough, runny nose, eye inflammation and a raised red rash. Complications include pneumonia, ear infections, encephalitis, seizures and death. It is one of the most infectious diseases, spreading easily among those not immune from previous infection or immunization.

In the pre-vaccine era, approximately 500,000 cases and 500 deaths were reported annually in the U.S.; however, estimates indicate that there were actually 3-4 million cases and that 90% of the population had measles by age 15.

Since licensure of vaccine in 1963, the incidence of disease in the U.S. decreased by more than 98%. In 2004, only 37 cases were reported nationwide. However, other countries have much lower rates of measles vaccination and continue to be reservoirs of infection. The majority of the cases in the U.S. are due to importation.

In May 2006, a laboratory-confirmed case of measles was identified in an unvaccinated individual who had recently come to the U.S. from India. He worked in a large office building in downtown Boston, and active surveillance resulted in the identification of seven additional cases in co-workers. Two additional cases occurred in individuals working for other companies in the same office building and eight cases occurred in those living or working nearby. One case was hospitalized and several others received IV fluids in emergency departments. Genotyping of virus isolates, performed at the Centers for Disease Control and Prevention, identified the strain to be "D8", which is consistent with an Indian origin.

Nine of the 18 cases had an unknown immunization history. Twelve cases were U.S.-born. Over 12,000 doses of measles-mumps-rubella (MMR) vaccine were distributed for outbreak control. Many of these doses were given to susceptible patients and staff exposed in health care settings.

Many of the cases were young adults in their 20's and 30's, and therefore, were not old enough to have had measles (those born in the United States before 1957 are assumed to have had infection and are considered immune) and too old to have been affected by the 2 dose MMR school entry policy implemented in 1991. Additionally, documentation of vaccination history or serologic proof of immunity was often not available. Thus, this outbreak reinforces the conclusion that many young adults are not protected against measles. It is important to review the immune status of all individuals, particularly those in this age group, and ensure they are immune.

Over 120 suspect cases were investigated. Nearly all measles cases were evaluated at some point during their infectious period. Often, these infectious individuals were not immediately identified as suspect measles cases and not on proper precautions during their medical evaluation. This led to exposures in many health care settings. When such an exposure occurs, the immunity status of all exposed (including patients and staff) must be immediately assessed. MMR vaccine can be given within 72 hours of exposure to prevent disease among exposed, susceptible individuals. If MMR vaccine is not given within the appropriate time period, exposed susceptible individuals must be excluded and quarantined from the 5th through the 21st day after their exposure. Therefore, to avoid spread of disease as well as exclusion, all health care workers should be immune to measles and have appropriate documentation that is readily accessible.

Fortunately, no cases have been reported in school-aged children, thus far. This is likely due to the high vaccination rates in children throughout the Commonwealth. However, health care providers and schools are encouraged to review the records and ensure that all children are up-to-date for MMR.

Timely reporting of measles is essential for effective control measures. Cases or suspect cases of measles should be reported immediately to the local board of health and to the MDPH Division of Epidemiology and Immunization at (617)983-6800. Additional information is available at: http://www.mass.gov/dph. This includes the newly revised Guide to Surveillance and Reporting (2006) and measles fact sheets in English, Spanish and Portuguese.

Susan M. Lett Appointed to the Advisory Committee on Immunization Practices

Susan M. Lett, MD, MPH has been appointed by Secretary of Health and Human Services (HHS) Michael O. Leavitt to the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC).

The ACIP, consisting of 15 members appointed by the Secretary of HHS, advises the director of CDC and the Secretary of HHS on control of vaccine-preventable disease and vaccine usage. Recommendations of the ACIP become CDC policy when they are accepted by the director of CDC and are published in CDC's Morbidity and Mortality Weekly Report (MMWR).

Dr. Lett has been with the Massachusetts Department of Public Health for 19 years, where she is currently the Medical Director of the Immunization Program. Under her leadership, Massachusetts has achieved the highest immunization rates in the nation for children younger than two years of age. Dr. Lett is a graduate of St. Anselm's College nursing program, the Medical College of Virginia and Harvard University School of Public Health. She has worked in refugee camps in Thailand and as a consultant for the William Joiner Foundation in Vietnam, and currently serves on numerous national and statewide task forces and advisory groups.

Dr. Lett's appointment to the ACIP is a tribute to her expertise and an acknowledgement of all that she has accomplished in the field of immunization.

You be the Epi

Case: A 41-year-old man presents to the clinic complaining of intermittent rectal bleeding for the last two months. He has also noticed anal spasms and rectal pain in the last month. He denies fever, chills, abdominal cramps/pain, diarrhea or vomiting. He is HIV-positive and has been on highly active antiretroviral therapy (HAART) for over one year with an undetectable viral load and a CD4 cell count of 350.

The patient had 3 male sexual partners in the last 3 months. He engages in unprotected receptive and insertive oral/anal intercourse. He reports no other symptoms other than those of the chief complaint. He has not traveled abroad.

Does the patient have proctitis, proctocolitis or enteritis?
It's important to differentiate the symptoms of proctitis, from proctocolitis and from enteritis in order to develop an appropriate differential diagnosis.

Proctitis involves only the rectum and manifestations include anal pain, tenesmus, constipation, mucous discharge and bleeding. Anal/perianal ulcers or vesiculo-pustular lesions may be present. When a colonoscopy is performed, the abnormality is limited to the rectum.

Proctocolitis involves the rectum and colon. Symptoms include those of proctitis, as well as diarrhea and/or abdominal cramps. Left lower quadrant tenderness is often present. The abnormality on colonoscopy extends more than 12 cm from the anus.

Enteritis involves the small bowel. It is associated with diarrhea (sometimes bloody), cramps, nausea, bloating and fever; diffuse or localized abdominal tenderness is usually present. The colonoscopy is normal. The patient's symptoms are consistent with proctitis.

What could be causing his symptoms?
His physical examination is normal except for the anoscopy, which reveals the presence of abnormal rectal mucosa and exudate. The patient engages in sexual behaviors that put him at risk for sexually transmitted diseases (STDs). *Neisseria gonorrhoeae*, herpes simplex virus and syphilis can cause proctitis. *Chlamydia trachomatis* (CT) serovars D through K (non- LGV), which cause anogenital infections, and L_1, L_2, L_3, responsible for lymphogranuloma venereum (LGV), can also cause proctitis and proctocolitis. Although LGV has been rare in the United States, cases in men who have sex with men (MSM) have been reported more frequently in the last year. Most have presented with gastrointestinal symptoms (see CD Update Vol 13; number 2; Spring 2005). Cases have been confirmed in Massachusetts.

Which laboratory tests would you order?
The following laboratory tests should be performed: a serologic test for syphilis (RPR), a rectal culture for gonorrhea, chlamydia and herpes simplex virus. In addition, given the history of exposure, a urethral test for chlamydia and gonorrhea, and a pharyngeal culture for gonorrhea should be done. If available, a gram stain on a rectal specimen could presumptively identify gonorrhea.

Cultures are the only FDA-approved tests for gonorrhea for rectal and pharyngeal sites. Culture and direct immunofluorescent tests (DFA) are the only FDA-approved/cleared tests to detect chlamydia in the rectum.

The diagnosis of LGV is based on clinical findings, supported by direct identification of CT or by serologic tests for CT. Serologic testing for antibodies to CT, which has not been well standardized, is not considered specific for LGV, but may support a clinical diagnosis, if the titer is higher than 1:512. Direct identification of CT by commercially available methods is also not specific for LGV serovars. Use of rectal swabs for nucleic acid amplified testing (NAAT) has not been cleared by the U.S. Food and Drug Administration (FDA), but it has been validated by some hospital and health department laboratories, including the State Laboratory Institute. The CDC is collaborating with health departments to assist in the laboratory diagnosis of LGV with specialized genotyping testing. Contact the Division of STD Prevention if you suspect a case of LGV. We can assist in direct identification and serologic testing for CT in cases compatible with LGV as well as with partner management services.

How would you manage the patient?
The symptoms of the patient are compatible with a gonococcal and/or chlamydial (LGV and non-LGV) proctitis. Herpes simplex and syphilis are less likely given the absence of ulcers. It would be reasonable to presumptively treat the patient for gonorrhea (ceftriaxone 250 mg IM single dose – Massachusetts recommendation) and LGV (doxycycline 100 mg orally twice a day for 21 days – which would also cover non-LGV chlamydia infection).

What is the final diagnosis?
LGV. The patient had a positive rectal NAAT performed at the SLI. The specimen was sent to the CDC where genotyping using polymerase chain reaction (PCR) amplification was performed. The testing identified *Chlamydia trachomatis* type L_2. The serologic titer for *Chlamydia trachomatis* was 1:1024. The cultures for gonorrhea were negative at all anatomical sites. The RPR, culture for HSV and urethral test for chlamydia were also negative.

How should the partner be managed?
The CDC recommends that sex partners with contact within the previous 30 days of the patient's onset of symptoms should be evaluated. In the absence of symptoms, they should be treated with either azithromycin 1 g orally in a single dose or doxycycline 100 mg orally twice a day for 7 days.

In summary:

- Clinicians who care for MSM should consider LGV in the diagnosis of compatible syndromes, particularly proctitis. Other manifestations of LGV include tender lymph nodes (inguinal and/or femoral which can become fluctuant) and anogenital ulcers (small, generally painless ulcer followed by the appearance of tender lymph nodes)
- Contact the Division of STD Prevention if you suspect a case of LGV. We can assist in direct identification and serologic testing for CT in cases compatible with LGV as well as with partner management services
- Perform direct identification testing for CT per STD Division recommendations

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Refugee and Immigrant Health

Refugees and Asylees Settling in North Shore Communities

The North Shore in general, and the city of Lynn in particular, have a history of receiving refugees and asylees. Refugee resettlement, however, is dynamic and new populations are often resettled in waves. Through the 1990's, most refugees arriving in the North Shore were from the former Soviet Union and Bosnia. More recent resettlement has included Afghan, Somali and Sudanese refugees.

Demographic changes are clearly evident when fiscal years 2002-2006 are reviewed. (Note that the fiscal year starts July 1, July 1, 2001 through June 30, 2006):

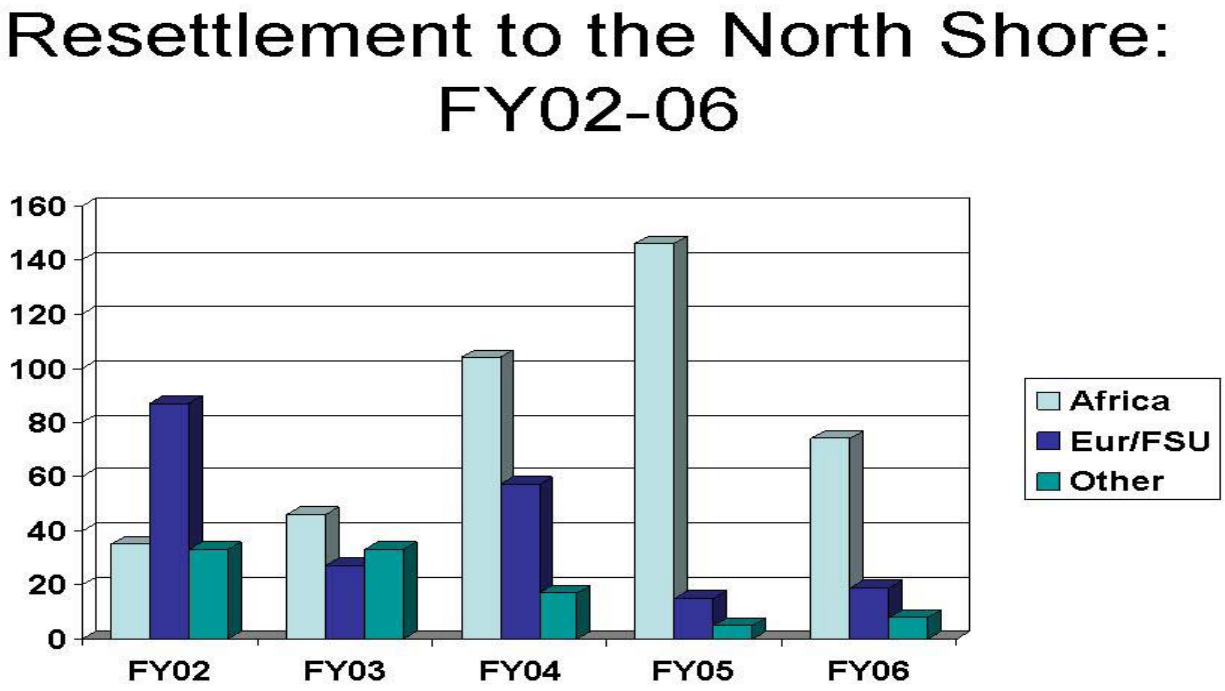
- During FY 2002, 124 refugees resettled in the Lynn area – two-thirds were from Russia, Ukraine and Bosnia, many joining family members resettled earlier. Other refugees were from Afghanistan (15), Iraq (9), Somalia (8) and Sudan (8). An additional 31 individuals were either granted asylum or arrived from overseas to reunite with a family member previously granted asylum; half were from six African countries. Asylees, like refugees, meet the U.S. government standard of having a well-founded fear of persecution should they return to their country; unlike refugees, there is no formal 'pre-arrival' linkage with resettlement agencies and services.

- Refugee admissions slowed dramatically after September 11, 2001 and did not recover until FY2004.

- During FY2003, an increasing proportion of refugees were from Africa. FY2004 saw both the greatest number of refugees resettled in a single year and, for the first time, over half of arrivals were from Africa.

- Although resettlement numbers declined slightly in FY2005 to 126, African refugees, including Somali Bantu, Liberian and Sudanese, made up nearly 90% of arrivals. Many had lived in refugee camps for a decade or longer before coming to the U.S.

Health and social service providers have responded to the changing profile of refugee resettlement (see box). In addition to assuring trained language interpreters, providers have considered cultural accessibility. Community linkages have resulted in increased opportunity to learn about histories, backgrounds, cultural norms and expectations, as well as approaches to health and wellness. Together, language and culture access have led to provisions of valued and trusted providers, services and institutions.



Many thanks to Marie Turner, M.D.

The Tuberculosis Division is pleased to recognize Dr. Marie Turner for her compassion, dedication and commitment to TB prevention and control. Marie is the medical director of the Tuberculosis Treatment Unit (TTU) at the Lemuel Shattuck Hospital (LSH) where she has been a pulmonary physician for 18 years.

Marie provides care for the most complicated patients with TB, those who require hospitalization for complex medical conditions, such as, TB/HIV co-infection, disseminated TB involving multiple organs and multi-drug resistant TB. After discharge, many difficult-to-treat patients are then seen by Marie at the LSH TB clinic where they continue to receive treatment until cure.

Marie's approach to all her patients exemplifies her compassion and a deep awareness of their suffering. One of Marie's patients, in a recent letter to the CEO at the LSH, described Marie as "a pulmonary specialist having superb medical skills and excellent professional standards. Her high professional standards are better reflected in her devotion to patient care." Patients have said that she considers it her personal mission to cure them, and they find her to be selfless. Marie tells us that she loves tuberculosis care and treatment because her patients come to her very ill (with complicated medical and social problems) and get so much better. She finds that she can really make a difference, particularly with the availability of effective treatment for HIV infection. Marie also works closely with local public health nurses in communities around the state to provide care for patients discharged from the hospital to the LSH tuberculosis clinic. Local public health nurses find her to be an accessible, invaluable mentor.

Marie attended Hahnemann Medical College in Philadelphia, and completed her internship and residency at the Montefiore Medical Center in New York City. She trained in Pulmonary Medicine and TB with Dr. Edward Gaensler at Boston University School of Medicine.

Marie has published a number of articles related to treating patient with drug resistant TB, HIV infected patients with latent TB infection and long term hospitalization for TB control. She teaches at the Faulkner Hospital and is often invited to share her knowledge and experience at tuberculosis conferences and courses.

Marie moved to Boston to join her husband, Dr. Abraham M. Colb, who was completing his residency in the city. Although she initially missed the Big Apple, she now enjoys Boston. Marie and her husband have raised their four daughters and one son in Boston. In her free time Marie volunteers at her children's high school where her son, the youngest, is in ninth grade and her daughter just graduated.

We thank Marie for her superlative professional standards, medical expertise, and humanitarian approach, as she is truly an invaluable asset to our TB team.

The Northshore Pulmonary Public Health Clinic

The Northshore Pulmonary Public Health Clinic (NPPHC) is located in Salem and has a long history of services for tuberculosis (TB) infection and disease. The clinic has seen many changes over the years, including in the diversity of the patient population.

NPPHC has made adjustments and changes that have allowed the clinic to better serve their larger and more diverse population better. Strong working relationships, clear communication processes, and flexibility are the norm for NPPHC. Decisions can be made on a case by case basis; nurse clinic hours are flexible; and wait times have been reduced. Health education and follow-up care are given special attention. With efficient, time-saving procedures in place, more time is dedicated to TB education and awareness with patients. This is important, not only for individual patients, but also for the broader communities that the clinic serves. One goal for the clinic is be recognized as a resource: a place where both patient and providers can come for specialized, accurate information on TB.

Partnerships with DPH Refugee and Immigrant Health Program and the Division of TB Prevention and Control community outreach educators have been crucial in building community linkages with the clinic, as well as engaging individuals in follow-up care. Embracing the outreach educator as a vital member of the NPPHC team has also allowed the nurses and doctors to treat each patient with greater individual care. Partnerships with outreach have also helped the clinic to extend support to patients beyond their TB needs, to issues such as primary care access, transportation and family hardship. Although the focus of the clinic is TB, this more holistic approach helps encourage patients to return for follow-up.

~ With thanks to Patty Conway, RN, clinic nurse and Mary Jane Thomas, clinic administrator.

HIV/AIDS: Analysis By Health Service Regions

As of July 1, 2006, a total of 16,403 people have been reported to the HIV/AIDS Surveillance Program of Massachusetts Depart ment of Public Health and are known to be living with HIV/AIDS. In order to understand the impact of HIV/AIDS better, as well as to provide services where needed, information on reported cases is analyzed for six Health Service Regions (HSRs). The HSRs are: Boston, Metrowest, Northeast, Southeast, Central and Western. Data on incarcerated persons (prisoners) are considered separately, regardless of the location of the facility in which they were incarcerated at the time of their diagnosis.

The total number of people living with HIV/AIDS (PLWHA) within each HSR and the percentage of cases within each HSR, as well as the rate [per 100,000 population in each HSR], are as follows: Boston — 5,347 (32.6%) [716], Metrowest – 2,026 (12.4%) [137], Northeast – 2,370 (14.5%) [189], Southeast – 2,279 (13.9%) [184], Central – 1,460 (8.9%) [181] and Western – 1,914 (11.7%) [233]. There are significant differences as to reported mode of exposure to HIV among PLWHA, as well as gender and race/ethnicity, in each HSR. Recognition of these differences helps target prevention programs and client services.

Some of the prominent differences across HSRs are: adult PLWHA whose mode of exposure to HIV was 'male sex w/male' (MSM) constitute 46.2% of cases in the Boston HSR, but only 20.8% of the HIV/AIDS cases in the Central HSR. Conversely, adult PLWHA with 'injection drug use' (IDU) as their mode of exposure to HIV constitute 18.2% of the cases in the Boston HSR but 37.2% of the cases in the Central HSR. PLWHA with heterosexual mode of exposure to HIV constitute 11.5% of the cases in the Metrowest HSR but 19.5% in the Western HSR.

For observed differences based on gender, the proportion of cases among PLWHA who are female is 23.8% in the Boston HSR, but 38.0% and 38.3% in the Central and Western HSRs, respectively. By race/ethnicity, PLWHA who are white constitute 28.7% of PLWHA in the Western HSR, but more than half (53.5%) of those in the Metrowest; individuals who are Hispanic constitute 11.1% of PLWHA in the Metrowest, but 51.0% in the Western HSR; and people who are black constitute 19.6% of PLWHA in the Northeast HSR, but 37.5% in the Boston HSR.

Differences across HSRs indicate that HIV/AIDS in Massachusetts represents several 'regional' epidemics across different subpopulations.

Massachusetts to Implement HIV Reporting by Name

The Massachusetts Department of Public Health (MDPH) will begin a transition to a HIV surveillance system that includes the full name. The United States Congress will use HIV surveillance aggregate data as a basis for the distribution of Ryan White Care Act funding.

The transition will be done in collaboration with the HIV Surveillance Implementation Team in a similar process that led to the very successful implementation of the name-based coded system in 1999. The HIV Surveillance Implementation Team is composed of MDPH staff, HIV/AIDS care providers, consumers, and representatives from community-based organizations. The first step in the transition process is the submission of a formal plan (by October 1, 2006) to CDC that describes how names will be integrated in the existing HIV surveillance system in Massachusetts.

The name-based code system for HIV reporting, in effect since 1999, used a lletter/digit sequence derived from various elements of patient's name, sex, date of birth, social security number and zip code of residence. This system was created and implemented in accordance with recommendations from the HIV Surveillance Implementation Team. The primary intent for the code-based HIV reporting was to ensure accurate surveillance for HIV infection while assuring the confidentiality of people being tested for HIV infection. It performed very well in this regard.

The written plan for transitioning to a name reporting system will cover the following topics: maintaining confidentiality, community awareness, health care provider training, and compliance with federal guidelines.

Profile of People Living with HIV/AIDS (PLWHA) in Massachusetts: Analysis by Health Service Region* (HSR: number, %)

	Massachusetts**	Boston	Metro West	Northeast	Southeast	Central	Western	Prisoners
MODE OF EXPOSURE (adults)	16,122	5,273	1,993	2,324	2,240	1,423	1,862	1,001
Male Sex w/Male	5,455 33.8%	2,438 46.2%	766 38.4%	690 29.7%	816 36.4%	296 20.8%	394 21.2%	53 5.3%
Injection Drug Use	4,421 27.4%	959 18.2%	329 16.5%	569 24.5%	643 28.7%	529 37.2%	657 35.3%	733 73.2%
Male/Male Sex & IDU	521 3.2%	176 3.3%	62 3.1%	64 2.8%	69 3.1%	41 2.9%	63 3.4%	46 4.6%
Receipt of blood/products	127 0.8%	35 0.7%	27 1.4%	14 0.6%	21 0.9%	20 1.4%	9 0.5%	1 0.1%
Heterosexual Sex	2,189 13.6%	589 11.2%	230 11.5%	350 15.1%	337 15.0%	260 18.3%	363 19.5%	60 6.0%
Presumed Het-Unk Risk of Prtnr[h]	2,458 15.2%	780 14.8%	419 21.0%	448 19.3%	237 10.6%	218 15.3%	276 14.8%	79 7.9%
Undetermined/Other	951 5.9%	296 5.6%	160 8.0%	189 8.1%	117 5.2%	59 4.1%	100 5.4%	29 2.9%
MODE OF EXPOSURE (pediatric)	281	74	33	46	39	37	52	
Mother w/HIV/at risk for HIV	269 1.7%	72 1.3%	28 1.4%	44 1.9%	37 1.7%	36 2.5%	52 2.8%	
Receipt of blood/products	8 0.0%	1 0.0%	4 0.2%	1 0.0%	2 0.1%	0 0.0%	0 0.0%	
Undetermined	4 0.0%	1 0.0%	1 0.1%	1 0.0%	0 0.0%	1 0.1%	0 0.0%	
GENDER	16,403	5,347	2,026	2,370	2,279	1,460	1,914	1,001
Male	11,673 71.2%	4,073 76.2%	1,451 71.6%	1,594 67.3%	1,611 70.7%	905 62.0%	1,181 61.7%	855 85.4%
Female	4,730 28.8%	1,274 23.8%	575 28.4%	776 32.7%	668 29.3%	555 38.0%	733 38.3%	146 14.6%
RACE/ETHNICITY	16,403	5,347	2,026	2,370	2,279	1,460	1,914	1,001
White	7,458 45.5%	2,270 42.5%	1,083 53.5%	1,123 47.4%	1,484 65.1%	650 44.5%	549 28.7%	296 29.6%
Black	4,526 27.6%	2,007 37.5%	668 33.0%	464 19.6%	450 19.7%	292 20.0%	366 19.1%	278 27.8%
Hispanic	4,091 24.9%	964 18.0%	224 11.1%	692 29.2%	316 13.9%	497 34.0%	976 51.0%	420 42.0%
Other/Unknown	328 2.0%	106 2.0%	51 2.5%	91 3.8%	29 1.3%	21 1.4%	23 1.2%	7 0.7%

*Residence at diagnosis

**State total includes ten persons whose city/town of residence was unknown at the time of report.

Hepatitis C in Youth

Continued from page one

ensure appropriate services are provided.

Sources:
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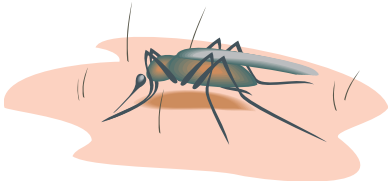
Miller CL, Spittal PM, Frankish JC, Li K, Schechter MT, Wood E. HIV and hepatitis C outbreaks among high-risk youth in Vancouver demands a public health response. Can J Public Health. 2005 Mar-Apr; 96(2): 107-8



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http://www.mass.gov/dph/cdc/update/comnews.htm

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Influenza Update

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The Massachusetts Department of Public Health joins the CDC in urging you to:

- Vaccinate more persons against influenza than during the previous year by expanding outreach and infrastructure
- Continue to offer vaccination throughout the influenza season. Vaccination clinics should continue even after influenza activity has been documented in a community.
- Develop contingency plans. Because of the complexities of the vaccine manufacturing process, distribution delays or vaccine shortages are possible. Plan for the timing and prioritization of administering influenza vaccine, if the supply of vaccine is delayed and/or reduced.

For up-to-date information on influenza vaccine availability from the Massachusetts Department of Public Health Immunization Program, please call the vaccine unit at 617-983-6828.

Visit the Massachusetts Department of Public Health flu website at www.mass.gov/dph/flu.

To locate a public flu vaccine clinic, go to http://flu.masspro.org. To post a clinic on the MassPRO flu clinic website, call Sheryl Knutsen at 781-419-2749.

Recommendations adapted from:
CDC. Prevention and Control of Influenza Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-10):1-2.
http://www.cdc.gov/mmwr/PDF/rr/rr5510.pdf

You Be the Epi

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- Perform testing for *Neisseria gonorrhoeae* and other STDs (syphilis; HIV and HSV as appropriate).
- Perform serologic testing for CT
- Cases compatible with LGV should be treated presumptively

For more information on specimen collection/testing and other assistance, contact Sylvie Ratelle, MD, MPH or Bill Dumas, RN, Division of STD Prevention, at (617) 983-6940.